



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

August 23, 2004

Karen J. Larson  
Regulatory Affairs Manager  
Clarke Mosquito Control Products, Inc.  
159 North Garden Avenue  
Roselle, IL 60172

Subject: Label Amendment - Adding additional Use Instructions  
Biomist 4+4 ULV  
EPA Reg. No. 8329-35  
Your Submission Dated April 1, 2004

Dear Ms. Larson:

The labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, is acceptable subject to the comments listed below. Two (2) copies of the finished labeling must be submitted prior to releasing the product for shipment. A stamped copy of the label is enclosed for your records.

1. Revise the Precautionary Statements to read as follows:

"Harmful if inhaled or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse."

2. Re-instate "Do not allow spray treatment to drift on pastureland, cropland, (other than crops listed) or water supplies." to the Environmental Hazards section.

If you have any questions regarding this action, please contact BeWanda Alexander of my team at (703) 305-7460.

Sincerely,

A handwritten signature in black ink, appearing to read "BeWanda Alexander for", written over the printed name of George T. LaRocca.

George T. LaRocca

Product Manager (13)

Insecticide Branch

Registration Division (7505C)

AUG 23 2004  
Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under EPA Reg. No.

8329-35

DRAFT LABELING

# **BIOMIST® 4+4 ULV**

For Application Only by Public Health Officials and Trained Personnel of Mosquito Abatement Districts and Other Mosquito Control Programs. For Use Outdoors as an Ultra-Low Volume (ULV) Application to Control Adult Mosquitoes in Residential and Recreational Areas.

Active Ingredients	
Permethrin (3-Phenoxyphenyl) methyl (+/-) cis, trans-3-(2,2-dichloroethenyl)-2,2-dimethyl cyclopropanecarboxylate .....	4.00%
Piperonyl Butoxide, Technical * .....	4.00%
Other Ingredients ** .....	92.00%
	100.00%

Contains 0.3 pounds of Permethrin and  
0.3 pounds of Piperonyl Butoxide per gallon.

\* Equivalent to 80% (butylcarbityl)(6-propylpiperonyl) ether and 20% related compounds.

\*\* Contains petroleum distillate

## **CAUTION KEEP OUT OF REACH OF CHILDREN**

Manufactured By  
**CLARKE MOSQUITO CONTROL PRODUCTS, INC.**  
159 N. GARDEN AVENUE  
ROSELLE, ILLINOIS 60172

EPA Reg. No.: 8329-35

EPA Est. No.: \_\_\_\_\_

NET CONTENTS: \_\_\_\_\_

LOT NO.: \_\_\_\_\_

### **FIRST AID**

Have product container or label with you when calling a poison control center or doctor, or going for treatment. For Medical Emergencies, call the International Poison Control Center at 1-800-214-7753.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth. Call a poison control center or doctor for further treatment advice.

**IF SWALLOWED:** Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. Call a poison control center or doctor for treatment advice.

**NOTE TO PHYSICIAN:** Product contains a petroleum distillate. Vomiting may cause aspiration pneumonia.

### **PRECAUTIONARY STATEMENTS**

#### **HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**Caution.** Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating or smoking.

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Remove and wash clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

#### ENVIRONMENTAL HAZARDS

This product is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame. Flashpoint minimum of 300 °F.

#### DIRECTIONS FOR USE

**It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.**

BIOMIST® 4+4 ULV is recommended for applications as an ultra low volume (ULV) nonthermal aerosol (cold fog) to control adult mosquitoes in residential and recreational areas and other areas these insects occur, such as but not limited to parks, campsites, woodlands, athletic fields, golf courses, residential areas and municipalities, gardens, playgrounds, recreational areas and overgrown waste areas. Do not apply this product within 100 feet (30 meters) of lakes and streams. For best results treat when mosquitoes are most active and weather conditions are conducive to keeping the spray cloud close to the ground. An inversion of air temperatures and a light breeze is preferable. During applications, ground wind speeds should not exceed 10 MPH. Application after sunset or before sunrise is usually preferable.

BIOMIST® 4+4 ULV can be applied over specific growing crops and range grasses prior to harvest for the control of adult mosquitoes within or adjacent to these areas. Application can only be made where the following crops are present:

Almond	Corn, fodder	Onion, dry bulb
Apple	Corn, forage	Peach
Broccoli	Corn grain	Pear
Brussels sprouts	Eggplant	Pepper, bell
Cabbage	Range Grasses	Soybean
Celery	Leafy vegetables (except Brassica)	Tomato
Cauliflower	Lettuce, head	Vegetables, cucurbit, group 9
Cherry	Mushroom	Walnut

In the treatment of corrals, feedlots, swine lots, poultry ranges and zoos cover any exposed drinking water, drinking fountains and animal feed before application.

Aerosol droplet size of BIOMIST® 4+4 ULV application may be determined using generally acceptable methods such as, but not limited to, A.I.M.S., PC-DC-III, or Teflon® coated glass slides. When using coated glass slides, an adequate volume of air should be sampled by using, for example, rotating slide impingers. Depending on the apparatus used, follow manufacturer's instructions for obtaining droplet measurements. Slides should be examined microscopically and the diameter of the droplets measured in microns. Slides should be scanned until at least 200 droplets have been sized. A spread factor of 0.62 should be used to correct droplet diameters. The optimum droplet size range is from 8 to 30 microns volume median diameter (VMD).

**ULV Nonthermal Aerosol (Cold Fog) Application – Ground Application:** Apply BIOMIST® 4+4 ULV using any standard ULV ground applicator capable of producing a nonthermal aerosol spray with a VMD of 8 to 30 microns. No more than 3% of the droplets should exceed 50 microns. Apply undiluted at a flow rate of 4.5 to 18.0 fluid ounces per minute, and an average vehicle speed of 10 MPH. If a different vehicle speed is used, adjust rate accordingly. These rates are equivalent to 0.00175 to 0.007 pounds of Permethrin and Piperonyl Butoxide per acre.

Vary flow rate according to vegetation density and mosquito population. Use higher flow rate in heavy vegetation or when populations are high. An accurate flow meter must be used to ensure the proper flow rates. For proper application, mount the equipment so that the nozzle is at least 4 ½ feet above ground level and directed out the back of the vehicle. Failure to follow the above directions may result in reduced effectiveness.

#### CONDITIONS and RATES to USE for MOSQUITO CONTROL

Permethrin Pounds per Acre	Application Rates Fl.oz./Min.			Fl.oz. Biomist 4+4 ULV per Acre
	5MPH	10MPH	15MPH	
0.007	9.0	18.0	27.0	3.0
0.0035	4.5	9.0	13.5	1.5
0.00175	2.25	4.5	6.75	0.75

**ULV Nonthermal Aerosol (Cold Fog) Application – Aerial Application:** BIOMIST® 4+4 ULV may be applied undiluted at rates of 0.0035 to 0.007 pounds Permethrin (1.5 to 3.0 fl.oz. BIOMIST® 4+4 ULV) per acre by fixed wing or rotary aircraft equipped with suitable ULV application equipment. Aerial application should be made at an altitude below 300 feet and at a forward speed necessary to achieve a droplet VMD of 20 to 50 microns. Do not apply when ground wind speeds exceed 10 MPH. Aerial applications shall only be made when recommended by public health officials and trained personnel of mosquito abatement districts and other mosquito control programs.

**IN FLORIDA:** Do not apply by aircraft except in emergency situations and with the approval of the Florida Department of Agriculture & Consumer Services.

**Urban ULV Mosquito Control Applications:** For control of resting or flying adult mosquitoes in areas such as utility tunnels, sewers, storm drains and catch basins, pipe chases, underground basements, underground passages, parking decks, crawl spaces or uninhabited buildings, apply BIOMIST® 4+4 ULV undiluted using mechanical foggers, hand-held or truck-mounted ULV equipment, or thermal foggers suitable for this application. Apply BIOMIST® 4+4 ULV at rates up to but not exceeding 0.007 lbs. permethrin and piperonyl butoxide per acre.

#### STORAGE & DISPOSAL

Do not contaminate food, feed, or water by storage or disposal.

**PESTICIDE STORAGE AND SPILL PROCEDURES:** Store upright at room temperature. Avoid exposure to extreme temperatures. In case of spill or leakage, soak up with an absorbent material such as sand, sawdust, earth, fuller's earth, etc. Dispose of with chemical waste.

**PESTICIDE DISPOSAL:** Pesticide, spray mixture or rinse water than cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

**CONTAINER DISPOSAL:** Metal containers – triple rinse or equivalent, then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Plastic containers – triple rinse, or equivalent, then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. Then dispose of in a sanitary landfill or by other approved state and local procedures.

IN CASE OF MEDICAL EMERGENCY,  
CALL THE INTERNATIONAL POISON CONTROL CENTER  
1-800-214-7753

IN CASE OF TRANSPORTATION EMERGENCY,  
CALL INFO-TRACT 1-800-553-5053

**FOR MORE INFORMATION CALL: 1-800-323-5727**

NOTICE: Seller makes no warranty, expressed or implied, concerning the use of this product other than as indicated on the label. Buyer assumes all risk of use/handling of this material when use and/or handling is contrary to label instructions.